

FM Transmitter - 1,2 kw:

Dual Solid State Amplifier

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2x Dual - BLF278(2x 600 watt = 2x 2x 300 Watt)

- * 86-110MHz 48 Volts
- * Input/Output 50 ohms
- * Pout 600W with a 6.5 watt input.
- * 700W+ peak power.
- * 19dB gain minimum.
- * Low distortion Class B push-pull.
- * Small size: only 5 in x 9.0 in
- * 68% efficiency typical.
- * Power requirements 19 to 21 ADC 650W out at 48V.

Components:

Solid State transistor	120,- Euro/piece	x	4 pcs	= 480,- Euro
heat sink	20,- Euro/piece	x	2 pcs	= 40,- Euro
power amplifier - telco - equipment standard 25-30 amp	20,- Euro/piece	x	2 pcs	= 40,- Euro
PCB + parts	50,- Euro	x	2 pcs	= 100,- Euro
Total				= 660,- Euro

Exciter

Frequency
RF Power Output
Frequency Stability
RF Output Connector
Audio Input Sensitivity
Signal To Noise Ratio
Frequency Response
Pre-emphasis
Audio Distortion
Audio Input Connector
Power Input

(87.5-108MHz) User Programmable
Typ 1000mW into 50 Ohm load
PLL Typ +/- 500 Hz
SO239
0.775 V rms for +/- 75 KHz
80 dBu
Flat from 30 Hz to 76 KHz
(50uS/ 75uS/ None) Selectable
Better than 0.02 % THD
Phono/ RCA type unbalanced sockets
13.8V DC Regulated 750mA

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Price : 80,- Euro

Schaltschrank/Wandkasten/ Box:

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	Box:	80,- Euro
	Custom work:	40,- Euro
	(like holes for antenna cables -	
power cable)		

Total: 120,- Euro

The amplifiers (2x 600 watts) are mounted in that box together with the exciter and link-receiver/rebroadcast receiver.

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Combiner Teflon

eal for splitting and combining up to 1KW FM signals

Designed for FM radio transmitters, these Teflon splitter combiner

assemblies are ideal for splitting and combining FM signals in the 88-108MHz frequency range.

Splitter combiners are useful for combining RF amplifiers to obtain high power levels. They are also used on multi-bay antenna setups.

This combiner will handle up to 1000 watts because of its extremely low loss characteristics and Teflon construction.

These combiners should not be used to combine 2 600 or 700W Pallets. Use 2000W combiner for that unit!

These combiners and flange mount 100 ohm resistor must be secured to a heat sink to insure a good ground and to keep the pcb cool. The back side of the pcb can be coated with a very thin layer of heat sink compound. All mounting holes should be used.

The resistors are not attached to the PCB. We leave this job to the end user.

An AutoCad/DXF file showing the mounting hole locations is available upon request.

The table below summarizes the typical performance of our splitter/combiners. You will find that our combiners offer state of the art performance at a low price. Who else sells a high power combiner on a Teflon/ceramic substrate?

Frequency	Input Return Loss	Output Return Loss	Power Loss
88MHz	-34.46dB	-22.44dB	0.108dB
98MHz	-34.99dB	-27.14dB	0.092dB
108MHz	-39.33dB	-23.92dB	0.113dB

Technical specifications:

- Specifically designed for combining 2 RF amplifiers or driving 2 antennas.
- 1000 watt power rating.
- 0.12dB maximum power loss.
- PCB measures 4.94 inches x 3.18 inches.
- 250 watt 100 ohm power balancing resistor.
- PCB is Teflon with ceramic filler; 2oz copper. Tightly controlled dielectric constant.
- Non-reactive; this means you can use 3 boards to create a 4 way combiner!
- Guaranteed not to burn under high SWR conditions.
- Shipping weight: 0.1Kg

The splitter combiner set includes 2 Teflon Combiner PCB's and 2 resistors as listed below.

(1) The axial leaded resistor 100 ohms 5 watts is ideal for low power situations like at the input of a pair of pallet amplifiers.

(2) The 250 watt 100 ohm flanged resistor is intended for use at high power.

Price 80,- Euro

Power Amp for Exciter, rds encoder...:

Using a high end 400 Watt PC - Server - Power Amp with fan: 25,- Euro

Assembling/Quality check: 50,- Euro

Total so far: 935,- Euros